

Advantageously, the claimed method avoids a message from the responder to the second commander causing a collision with any message which another responder may send the first commander. Such a collision could be misinterpreted by the first commander as signifying that two responders had the same address. The claimed method is supported in Applicant's specification at page 33, line 24 – page 34, line 12.

The remaining claims are similar to claims allowed in the parent application SN 07/990,915, now U.S. Patent 5,500,650, of which the present application is a continuation. For sake of brevity, the undersigned will refer to the patentability arguments made in the amendment filed 6/5/95 in the parent application rather than repeat those lengthy arguments here.

Claims 25–31 are directed to a method of addressing responder transceivers in which each responder identifies itself by two addresses: a unique identification number and a shorter, possibly non-unique, arbitration address. In responding to an Identify command from the commander transceiver which specifies a subset of arbitration addresses, the arbitration address, rather than the longer unique ID number, determines which responder transceivers should respond. Each responder transceiver also transmits at least one message containing its unique ID number, thereby enabling the commander transceiver to associate any status information it acquires from the responder with the responder's unique ID. Claims 25–31 are similar to parent application claims 32–36 (patent claims 9–13), and they are patentable for the same reasons argued in the 6/5/95 amendment for the parent claims.

Claim 32 is directed to a method in which a Response Lock flag precludes a responder from continuing to respond to Identify commands after the commander already has acknowledged the responder. The claimed method advantageously reduces the time required for the commander transceiver to poll all the responder transceivers by enabling the commander to poll a relatively small number of wide subsets of responder addresses, rather than polling a relatively large number of narrow subsets of responder addresses. This is possible because a responder whose address has been recognized by the commander has its Response Lock flag set, which silences that responder from answering subsequent Identify messages from the commander. Consequently, the likelihood of collisions between identification messages from responders diminishes as more responders are identified and “silenced”, so that the commander need not poll as many narrow subsets of addresses to obtain a collision-free identification message from each responder. Claim 32 is similar to parent application claims 41–42 (patent claims 18–19), and it is patentable for the same reasons argued in the 6/5/95 amendment for the parent claims.

Claims 33–41 are directed to a method in which each of a number of responder transceivers chooses an address, each responder transceiver transmits its chosen address to a commander transceiver, the commander detects whether any responder transceivers chose identical addresses, and if so, the commander transceiver directs some or all of the responder transceivers to chose addresses again. This invention overcomes the need for the responders to use factory assigned,

unique addresses to identify themselves in communications with the commander. Claims 33–41 are similar to parent application claims 37–40 (patent claims 14–17), and are patentable for the same reasons argued in the 6/5/95 amendment in support of the parent claims.

Claims 42–49 are directed to a method similar to that described in the preceding paragraph, except that a Response Lock flag in each responder determines which responder transceivers choose their addresses again in case two or more of the responders choose identical addresses. Consequently, claims 42–49 are patentable for the same reasons argued in the 6/5/95 amendment in support of parent application claims 37–40 (patent claims 14–17).

Claims 50–54 are directed to a method similar to that described in the two preceding paragraphs, except that claims 50–54 recite with greater specificity the individual steps shown in the flow chart of Figure 10. Consequently, claims 50–54 are patentable for the same reasons argued in the 6/5/95 amendment in support of parent application claims 37–40 (patent claims 14–17).

Claims 55–68 are directed to a method in which, upon receiving a Generate command message from a commander transceiver, each responder transceiver chooses its address independently of addresses chosen by other responder transceivers. The claimed method is similar to the method of parent application claims 24–31 (patent claims 1–8). Consequently, claims 55–68 are patentable for the same reasons stated at considerable length in the 6/5/95 amendment in support of the parent application claims 24–31.

Claims 69–76 are directed to a method for a responder transceiver to identify itself by two addresses: a unique identification number and a shorter, possibly non-unique, arbitration address. Claims 69–76 are patentable for the same reasons stated above in support of claims 25–31.

Respectfully submitted,



Robert J. Stern
Attorney for Applicant
Registration no. 29,703

Tel. (415) 322-5990
Fax (415) 322-5991